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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/646,323

08/22/2003

Mark Smolenski

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7590

10/17/2006

WOOD, PHILLIPS, KATZ, CLARK & MORTIMER  
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SUITE 3800  
CHICAGO, IL 60661

EXAMINER

RODRIGUEZ, RUTH C

ART UNIT

PAPER NUMBER

3677

DATE MAILED: 10/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/646,323	<b>Applicant(s)</b> SMOLENSKI ET AL.	
	<b>Examiner</b> Ruth C. Rodriguez	<b>Art Unit</b> 3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2006.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-26, 29 and 30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-7, 21-25 and 29 is/are allowed.
- 6) ☒ Claim(s) 1-3, 8, 15-17, 26 and 30 is/are rejected.
- 7) ☐ Claim(s) 4, 9-14 and 18-20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.
2. The indicated allowability of claims 1-3, 8, 15-17 and 30 is withdrawn in view of the newly discovered reference(s) to Taxon (US 3,803,532) and Van Nagell (US 1,476,119). Rejections based on the newly cited reference(s) follow.

### ***Claim Objections***

3. Claims 2-4 and 8-20 are objected to because of the following informalities: Claim 2-4 and 8-20 recites the limitation "The combination" in the first line. There is insufficient antecedent basis for this limitation in the claim. Correction is required

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3, 8, 15-17 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Taxon (US 3,803,532).

A method of joining first and second tubular elements (10a,10) comprises the steps of: a) providing a first tubular element (10a) having a first axis, a first portion with a radially outwardly facing surface and a first connecting assembly (21a); b) providing a second tubular element (10) having a second axis, a second portion with a radially inwardly facing surface, and a second connecting assembly (17,19); c) aligning the first and second tubular elements in a preassembly state with the first and second axes substantially coincident and the first portion adjacent to the second portion (having the projection 21a beginning to enter the guide groove 17); d) relatively axially moving the first and second tubular elements from the preassembly state towards each other into a first relative axial position (Fig. 2); and (e) with the first and second tubular elements in the first relative axial position, relatively moving the first and second tubular elements around the first and second axes from a first relative rotational position (Fig. 2) into a second relative rotational position and thereby causing the first and second connecting assemblies to cooperate so as to draw the first and second portions axially towards each other where the first and second tubular elements are in a second relative axial position (Fig. 5). At least one of the radially inwardly and outwardly facing surfaces is tapered (at 15) so that by reason of the tapering a frictional force generated between the radially inwardly and outwardly facing surfaces on the first and the second portions is caused to be greater with the first and second tubular elements in the second relative axial position than with the first and second tubular elements in the first relative axial

position (C. 2, L. 60-67 and C. 3, L. 1 since the first tubular element 10a digs into the second tubular element 10 when in the second relative axial position). The step of causing the first and second connecting assemblies to cooperate comprises causing the first and second connecting assemblies to cooperate to releasably block (by wedging) the first and second tubular elements in the second relative rotational position (Fig. 6).

One of the first and second connecting assemblies comprises a first radially extending projection (21a) and the other of the first and second connecting assemblies has a first groove (17,19) in which the first projection guidingly moves as the first and second tubular elements are changed between the first and second relative rotational position (Figs. 1-7).

The first portion has a first radially outwardly extending projection (21a) and the second portion has a first groove (17,19) in which the first projection guidingly moves as the first and second relative rotational positions.

The first and second tubular elements are positionable in a second relative axial position wherein relative movement of the first and second tubular elements from the first relative rotational position into the second relative rotational position causes the first and second connecting assemblies to draw the first and second portions axially towards each other further than with the first and second tubular elements in the first relative axial position and the first and second tubular elements moved from the first relative position into the second relative rotational position (Figs. 2, 4, 6 and 7).

The first radially outwardly extending projection has an elongated shape with a length (Fig. 5).

The length of the first radially outwardly extending projection is directed in a circumferential direction at an angle to a plane orthogonal to the second axis (Fig. 5).

In combination a first tubular element (10a) and second tubular element (10). The first tubular element has a first axis, a first portion with a radially outwardly facing surface and a first connecting assembly (21a) at a first circumferentially facing surface. The second tubular element has a second portion with a second axis, a radially inwardly facing surface and a second connecting assembly (17,19) with a second circumferentially facing surface. The first portion extendable within the second portion so that the radially inwardly facing surface on the second tubular element surrounds the radially outwardly facing surface on the first tubular element (Figs. 2-7). The first and second tubular elements positionable in a first relative axial position (Fig. 2) where there is relative movement of the first and second tubular element around the first and second axes between a) first relative rotational position (Fig. 2) and b) a second relative rotation position (Fig. 5) causes the first and second connecting assemblies to cooperate to draw the first and second portion axially towards each other (Figs. 2-7). The first and second connecting assemblies cooperate so that the first and second circumferentially facing surface confront each other with the first and second tubular elements in the second relative rotational position to thereby block relative movement of the first and second tubular elements from the second relative rotational position back into the first relative rotational position (C. 2, L. 60-67 and C. 3, L. 1 since the first tubular element 10a digs into the second tubular element 10 when in the second relative axial position). The first and second tubular elements are positionable in a second relative axial

position wherein relative movement of the first and second tubular elements from the first relative rotational position into the second relative rotational position causes the first and second connecting assemblies to draw the first and second portions axially towards each other further than with the first and second tubular elements moved from the first relative rotational position into the second relative rotational position (Figs. 2-7). The radially outwardly facing surface on the first tubular element and radially inwardly facing surface on the second tubular element are relative dimensioned and at least one of the radially inwardly facing surface and the radially outwardly facing surface is tapered (at 15) so that by reason of the tapering the radially outwardly facing surface and the radially inwardly facing surface are urged against each other with a frictional force that is greater with the first and second tubular elements in the second relative rotational position than with the first and second tubular elements in the first relative rotational position (C. 2, L. 60-67 and C. 3, L. 1 since the first tubular element 10a digs into the second tubular element 10 when in the second relative axial position).

6. Claim 30 is rejected under 35 U.S.C. 102(b) as being anticipated by Van Nagell (US 1,476,119).

A method of joining first and second tubular elements (7,14) comprises the steps of: a) providing a first tubular element (7) having a first axis, a first portion with a radially outwardly facing surface and a first connecting assembly (11); b) providing a second tubular element (14) having a second axis, a second portion with a radially inwardly facing surface and a second connecting assembly (12); c) aligning the first and second tubular elements in a preassembly state with the first and second axes substantially

coincident and the first portion adjacent to the second portion (having the projection 21a beginning to enter the groove 12); d) relatively axially moving the first and second tubular elements from the preassembly state towards each other into a first relative axial position (with the projection hitting the straight section of the groove 12); (e) with the first and second tubular elements in the first relative axial position, relatively moving the first and second tubular elements around the first and second axes from a first relative rotational position (passing one of the corrugations 17) into a second relative rotational position and thereby causing the first and second connecting assemblies to cooperate so as to draw the first and second portions axially towards each other so that the first and second tubular elements achieve a second relative axial position (since the groove is inclined as shown in Figs. 2 and 5). The frictional force generated between the radially inwardly and outwardly facing surface on the first and second relative axial position than with the first and second tubular elements in the first relative axial position (due to the corrugations 17 that frictionally retain the projection 11). The step of causing the first and second connecting assemblies to cooperate to releasably block (due to the corrugations 17) the first and second tubular elements in the second relative rotational position (Fig. 1). The step of causing the first and second connecting assemblies to cooperate to cooperatively releasably block the first and second tubular elements in the second relative rotational position comprises causing circumferentially facing surfaces (projection 11 interacts with the corrugations in groove 12) on the first and second connecting assemblies to confront each other; and (f) relatively moving the first and second tubular elements around the first and second axes to a third relative position



(passing another corrugation 17 while being further inserted into the groove) arrived at by moving the first and second tubular elements from the first relative rotational position to and beyond the second relative rotational position and wherein circumferentially facing surfaces (11 when interacting with corrugations 17 of the groove 12) in the first and second connecting assemblies confront each other to block movement of the first and second element from the third relative rotational position back into the second relative rotational position (Page 1, lines 51-56).

***Allowable Subject Matter***

7. Claims 5-7, 21-25 and 29 are allowed.
8. Claims 4, 9-14 and 18-20 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

9. Applicant's arguments with respect to claims 1-3, 8, 15-17 and 26 have been considered but are moot in view of the new ground(s) of rejection.
10. The Examiner will like to point out that the claim 1 that was indicated as allowable was the claim included in the response filed on 02 June 2005 which was changed on the response filed on 05 October 2005 especially in view of Taxon.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gilbert (US 1,951,754), Pietro (US 4,911,573), Haynes (US 6,447,021 B1) and Ray et al. (US 6,811,190 B1) are cited to show state of the art with respect to telescoping mechanism having a connection means similar to the one being claimed by the current application.

Nishimura et al. (US 5,926,910) and Vesser (US 6,108,865) are cited to show state of the art with respect to fluid blower having a connection means similar to the one being claimed by the current application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth C. Rodriguez whose telephone number is (571) 272-7070. The examiner can normally be reached on M-F 07:15 - 15:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on (571) 272-7075.


Submissions of your responses by facsimile transmission are encouraged. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-6640.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ruth C. Rodriguez  
Patent Examiner  
Art Unit 3677

rcr  
October 13, 2006



**ROBERT J. SANDY**  
PRIMARY EXAMINER